

## PATENT ABSTRACTS OF JAPAN

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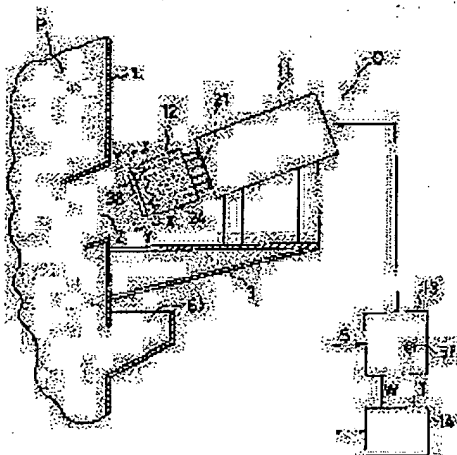
(21)Application number : 56-041881

(71)Applicant : ONODA CEMENT CO LTD

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SHIROKUNI SEIJI

### (54) MEASURING DEVICE FOR MOISTURE CONTENT IN POWDERY AND GRANULAR MATERIAL LAYER



#### (57)Abstract:

PURPOSE: To make stable measurement of high accuracy possible by providing an insertion cylinder like a bottomed cylinder by facing its opening part to an accumulated body of powdery and granular materials and inserting this insertion cylinder selectively into the accumulated body.

CONSTITUTION: A measuring hole 2 is formed to the side wall of a metering bin 1 in which powdery and granular materials P are accumulated. A frame 3 is projected from the outside surface near the hole 2 of said side wall, and a part of a measuring device Q for moisture content of this invention is fixed on this frame 3. An insertion cylinder 24 like a bottomed cylinder is provided opposite to said hole 2, and this cylinder 24 is inserted selectively into said accumulated body by a back and forth driving device 11. A pressure sensor 42 is provided in the cylinder 24, and the extent of the movement for insertion is controlled by this, whereby the density of the accumulated body is made constant at all

times and the stable measurement of high accuracy is made possible.

#### LEGAL STATUS

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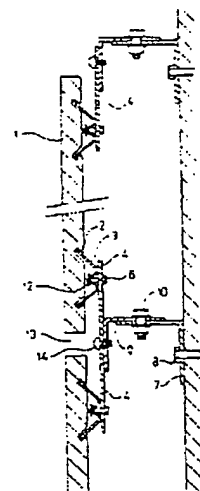
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## (54) MOUNTING METHOD OF LARGE-SIZED CERAMIC PLATE

(11) 5-7559 (A) (43) 19.3.1993 (19) JP  
 (21) Appl. No. 3-254432 (22) 6.9.1991  
 (71) FUJITA CORP(1) (72) KATSUMI KAWASE(4)  
 (51) Int. Cl.<sup>5</sup> E04F13/14, E04F13/08

**PURPOSE:** To make it possible to easily mount even such a heavy load plate as a large-sized ceramic plate to the external wall of a building, to enable the absorption of outer displacement such as expansion caused by temperature, contraction variation, vibration, etc., in a state to mount it to the external wall and to make it possible to surely prevent the large-sized ceramic plate from dropping caused by cracks.

**CONSTITUTION:** Cut sections 2 are provided to several positions around the rear of a large-sized ceramic plate 1, and an interlocking metal fixture 4 is mounted to an anchor piece 3 of an approximately W-shaped leaf through a bolt 6. The leaf is contracted by fastening the bolt 6 to fit the anchor piece 3 to one of the cut sections. The leaf is opened by loosening the bolt 6 to fix the anchor piece 3 to one of the cut sections 2, and a bracket 7 is fixed to a proper place on the wall of a building. A horizontal member 9 longer in the horizontal direction is mounted to the bracket 7 in parallel with the wall, and the large-sized ceramic plate 1 is placed to a specific position of the wall. The interlocking metal fixture 4 mounted to the large-sized ceramic plate 1 through the anchor piece 3 is brought into contact with the horizontal member 9, and the interlocking metal fixture 4 is fixed to the horizontal member 9.

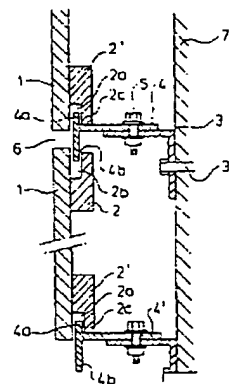


## (54) MOUNTING METHOD OF LARGE-SIZED CERAMIC PLATE

(11) 5-65760 (A) (43) 19.3.1993 (19) JP  
 (21) Appl. No. 3-254433 (22) 6.9.1991  
 (71) FUJITA CORP(1) (72) KATSUMI KAWASE(4)  
 (51) Int. Cl.<sup>5</sup> E04F13/14, E04F13/08

**PURPOSE:** To make it possible to easily mount even such a heavy load plate as a large-sized ceramic plate to the external wall of a building in a detachable manner.

**CONSTITUTION:** A mounting method of a large-sized ceramic plate 1 to a wall 7 is such that a short side 4a provided to a T-shaped horizontal member 4' is fitted into a cut section 2a provided to an anchor piece 2' downward of the large-sized ceramic plate 1. A long side 4b provided to a T-shaped horizontal member 4 is fitted into a cut section 2b provided to an anchor piece 2 upward of the large-sized ceramic plate 1.

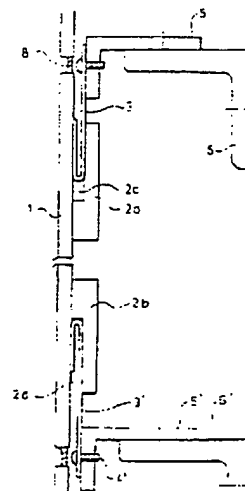


## (54) MOUNTING METHOD OF LARGE-SIZED CERAMIC PLATE

(11) 5-65761 (A) (43) 19.3.1993 (19) JP  
 (21) Appl. No. 3-254434 (22) 6.9.1991  
 (71) FUJITA CORP(1) (72) KATSUMI KAWASE(4)  
 (51) Int. Cl.<sup>5</sup> E04F13/14, E04F13/08

**PURPOSE:** To make it possible to easily mount even such a heavy load plate as a large-sized ceramic plate to the external wall of a building in a detachable manner.

**CONSTITUTION:** Ceramic anchor pieces 2a and 2b are mounted to several places around the rear of a large-sized ceramic plate 1. Fitting spaces 2c and 2d are provided to the anchor pieces, and a bracket 6 is provided to a proper position of the wall of a building. An L-shaped horizontal member 5 longer in the horizontal direction is mounted to the bracket 6 in parallel with the wall, connecting elastic member 3 having bent ends are placed to the L-shaped horizontal member 5, and the large-sized ceramic plate 1 is provided to a specific position on the wall. The large-sized ceramic plate 1 is mounted to the wall of the building in a detachable manner by fitting the spaces 2c and 2d for the anchor pieces 2a and 2b provided around the rear of the large-sized ceramic plate 1 respectively to the connecting elastic members 3 and 3'.



YOIT/ ★ P64 39963 K/17 ★ J5 8045-008  
Mfg. inorganic injection mouldings - using compsn. contg. water-  
curable cement, clay and water

YOITAS 10.09.81-JP-143322

A93 L02 (16.03.83) B28b-01/24 C04b-15/08

10.09.81 as 143322 (156WB)

Mfr. of inorganic mouldings comprises injection moulding  
compsn. consisting of (a) 50-80 pts.wt. water curable cement and  
(b) 20-50 pts.wt. clay and the min. amt. of water required to  
prevent shrinkage of mouldings.

Pref. the cement, includes portlant cement, flyash cement,  
blast furnace cement and silica cement. Pref. clay is plastic clay  
or Georgia kaolin. To obtain a moulding having desired  
characteristics silica, limestone, asbestos and glass fibre may be  
added and also sodium chloride, methylcellulose and calcium  
stearate.

A moulding having appearance or structure of ceramics can be  
easily produced without using thermosetting resin. Mouldings  
are used for garden furniture, toilet seats, wash bowls, bathtubs,  
draining boards, blocks and ornaments. (3pp)

N88-072655

YOIT/ ★ P64 47872 K/20 ★ J5 8059-803  
Moulded inorganic prods. mfr. - by forming plasticised compsn.  
from water, hydraulic cement and clay and extruding into  
required shape

YOITA S 07.10.81-JP-160656

A93 L02 (09.04.83) B28b-03/20 C04b-15/08

07.10.81 as 160565 (59KB)

Plasticised compsn. is prepd. by adding water into a mixt. of  
hydraulic cement (30-90 pts. wt.) and layer clay mineral (70-10 pts.  
wt.) in a sufficient amt. required for plasticising the mixt. or  
dewatering an aq. slurry of the mixt. for plasticising the mixt.  
and extruded to form a shaped prod. The extrusion of plasticised  
cement/clay mixt. facilitates the operation through an extruder  
to extrude a prod. having high extrusion resistance under  
relatively lower pressure.

Pref. hydraulic cement is white Portland cement, alumina  
cement, ordinary Portland cement, rapid hardening or moderate  
heat cement, jet cement, thermosetting cement, blast furnace  
cement, fly ash cement, silica cement, expansive cement and  
opt. blended with an expansive agent (e.g. ettringite-forming  
compsn. or  $\text{Ca}(\text{OH})_2$ -forming agent) for compensating the  
contraction of cement. The clay or clay material is typically  
kaolin or plastic clay. The mixt. is opt. blended with silica stone  
for forming tobermorite or xonotolite by steam ageing or  
reinforcing material (e.g. asbestos, rock wool, glass fibre, Nylon  
fibre, carbon filament or steel filament) or other additives (e.g.  
limestone, blast furnace slag, Ca silicate,  $\text{Al}(\text{OH})_3$ ,  $\text{Al}_2\text{O}_3$  or  
 $\text{ZrO}_2$ ). (3pp)

N88-086281